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Det. Bel Isle & Windsor Ferry Co 68

VOL. X NO. 8. CLEVELAND, O., FEBRUARY 23, 1888. $2.00 PER ANNUM. SINGLE COPIES 5 CENTS.

AROUND THE LAKES.

CLEVELAND.

The tug Spinning has been sold to Mr. Enright, of Toledo.

There will be a meeting of the Inter-lake drydock association at the Weddell house on Saturday, the 25th inst.

The Vessel Owners' Association held a meeting at M. Bradley's office yesterday, and took action on many important matters.

The new steel steamer building at the Globe Iron Works Co.'s yard, for the Lehigh line, will be launched on Wednesday the 29th.

Schooner Jura has been sold through Henry Brock to Captain Alf Miller, of Kenosha, for $6,000, and will be employed on Lake Michigan.

Mr. Fred Harmon, for the past four seasons engineer of the iron tug A. W. Colton, has been appointed chief engineer of the barge Margaret Olwell.

The first boiler for the Minch boat being built at Radcliffe's yard, for Mr. P. Minch is on the way to the boat. The second will start out in a day or two.

Mr. Riley, who was ship keeper on the Nashua, laid up near Columbus street bridge this winter, has disappeared, and it is feared that he has been drowned.

It appears that this is a good time for marine men to take the Scottish right degrees. Mr. J. F. Pankhurst and Mr. John Thomson have gone to Cincinnati to take the Scottish right degrees.

John Hogan, a ship carpenter, rooming at No. 108 Detroit street, was taken ill with erysipelas last Saturday. Hogan had no means nor friends, and the police sent him to the infirmary hospital on Monday.

Michael Healy, while working the shears on Mr. Ash's new boat, at Quayle's yard Tuesday, putting up a foremast, stepped back too far and fell from the forecastle deck to the ground, a distance of forty feet. Life was extinct in a few hours.

At the Cleveland Shipbuilding Co.'s yard, the keel is laid and many frames are up for the Lackawanna boat No. 2. The plating for No. 1 will all be on this week and the company express satisfaction regarding the speedy manner in which both boats are going forward.

Mr. J. J. McWilliams of Buffalo, secretary of the Lackawana line, and Messrs. C. H. Babcock of Rochester, and H. S. Holden of Syracuse, are in the city. They express great interest in the progress of the two new steamboats, being built at the Cleveland Shipbuilding Co., for the Lackawanna line.

Captain Smith Moore has been appointed master of the James Pickands, Captain Stover, of the N. K. Fairbanks, Captain Wm. Morse, of the Siberia, Captain B. Miller of the R. R. Rhodes, and Captain W. H. Humphrey will take command of the new boat now building at Quayle's yard. The engineers have not yet been named.

Meteorological summary for the week ending February 22, 1888:

Mean barometer	30 07
Mean temperature	34.9
Mean humidity	75 1
Total precipitation	.20
Prevailing direction of wind	West.
Total wind movement	1807
Av. cloudiness	3 9
Av. state of weather	Fair.
Max. temperature, highest	52 8
Min temperature, lowest	00

W. H. HAMMON, Sergt. Signal Corps, U. S. A.

The Cleveland Shipbuilding Co. is rebuilding the boilers of the steamer Superior, and rebuilding the cranks of the Kalyuga and making extensive repairs to the machinery. They are also fitting out the Cormorant, putting steering engines on the William Chisholm, overhauling the engine of the tug Cushing. They are also repairing and fitting out the steamer Onoko and Robert Wallace, and shifting the cranks on the William Edwards and putting in a new crank shaft, new boiler house and steel arches, two on each side 14x8 and fitting out the tugs Gregery and Starkweather.

Commodore George W. Gardner and Hon. Amos Townsend have gone to Washington as a committee of the board of industry to lay before the proper government authorities maps and plans for a change in the eastern arm of the breakwater. The government plan contemplates deflecting the arm toward shore, and the committee will endeavor to have this changed so as to extend the arm in a direct line. This change of plan is desired by all Cleveland interests and by all lake navigators as far as heard from.

Munson & Son, fish dealers, are having a tug built at Lorain, O., by Mr. Root. She will be about 60 feet over all. Her boiler will be built by Connolly and the engine by Messrs Manning. The engine, which will have some new features, will be 12 by 14. The novelty consists in the construction of an open frame of cast iron with a standard back, with two wrought-iron columns on the front of the machinery, thus enabling the engineer or oiler to get to any part of the engine. It will have slipper guides, and the link motion works directly on a center line. The equalizing rods working the link motion make the strain on each side equal and throw the bearing so that there will be no cramp. The new tug will have a Trout wheel.

At Cleveland drydock since our last report the Zack Chandler received new knightheads, part new stem, some stanchions, new rail, monkey rail and cap, stringers and other necessary repairs. Schooner Southwest got new trestle-trees. The Magnetic is getting some new work around the hatches and center board box. The Richard Winslow is getting some new plank outside, new knightheads, part new stem, new stringers, rail and plank sheer, new topgallant and forecastle rig, new taffrail aft, new centerboard box, new stanchions, and recalking. The Kitchen is getting new foremast, trestle trees, cross trees, new topmasts, boom and other repairs. The Argonaut is getting steel arches from Bassett, Presley & Train, 22 by ¾, new ceiling between decks, and refastenings. The Egyptian is getting a new boiler deck, iron boiler house, two new boilers, new bulk head and new engine room floor and other necessary repairs. The Specular, which is being converted into a steamboat with a compound engine, is getting a new rudder, new cabins forward and aft, new spars, steam steerer, an iron shoe and a Globe wheel. Captain Landfair will command this converted vessel.

KINGSTON.

The drydock deputation will not leave Kingston till about March 1 to address boards of trade in the west regarding the necessity of having a dock built at Kingston. Prominent marine men and insurance agents will also be waited on, and subsequently, a gentlemen will go from Kingston to the west to secure signatures to a document requesting the government to move in the matter.

MARINE CITY.

It is reported that Captain C. M. Saph will command the steambarge S. C. Clark, this season, and that Captain Geo. Phelps, late of the steam barge J. W. Westcott, will take his place in the D. F. Rose. Andrew Mannion will officiate as first engineer on the S. C. Clark.

The Marine Engineers' annual ball at the city hall was by all odds the largest attended of any this season and was a grand success both socially and financially. Prof. Winters informs us that at one time there were fifty set, or four hundred people, dancing on the floor. Next season the hall will have to be enlarged to accommodate the attendance.

John Laffrey will command the steambarge Lowell this season. John has been mate with Captain C. H. Westcott for several seasons, and deserves the promotion to the rank of captain. Will Tomlin, late on the M. Sicken, will go mate with him.

Capts. McLoud and Moore, hull inspectors for Inland Lloyd's Register, have been in the city a part of the week past looking over the vessel property in winter quartes here.

CHICAGO.

Special to the Marine Record.

Engineer W. W. Tyler is in the city, looking after the machinery of the steambarge Grover.

The Donaldson Bros., shipsmiths, on the north branch, are making the knees for the steambarge Emma Thompson.

At Miller Bros.' drydock the steamer Portage is undergoing some extensive repairs. She is getting new bulwarks, ceiling, stanchions, rail, new promenade deck, part new main deck, and new beams. The steambarge Roumania is being recalked, and a wheel replaced, which was broken in the hub, in a curious manner. Soon after she was docked it became very cold, and the water, which gathered in the box between the hub and the shaft, freezing, bursted the wheel. Wheels should have holes drilled through the hub to the shaft in order to allow the water to run out of the space which fills. Another plan suggested is to put in a packing of tallow, which, it is said, will prevent the damage caused by the expansion of the water as it congeals into ice. The steambarge Albert Sopher is having new stringers under the rail, steel arches, new decks, and will be recalked.

The appointments for the Central Vermont line, for the coming season, will be as follows: Steamer Walter L. Frost, Captain W. S. Shea master, Thomas Walsh chief engineer; steamer W. J. Everett, Captain Wm. Rollo master, A. Smith chief engineer; steamer W. A. Haskell, Captain H. Brown master, James Turnbull chief engineer; steamer John Pridgeon, Jr., Captain D. N. Sherwood master, J Morgan chief engineer; steamer Newburg, Captain Stoddart master, J. Walsh chief engineer; steamer Waverly, Captain W. Houligan, J. Tibbetts chief engineer; steamer Blanchard, Captain James Owen master, H. Seaton chief engineer; steamer St. Paul, Captain W. D. Waite master, engineer not yet appointed. The St. Paul has been recalked this winter from, low water line.

The appointments of masters and engineers for the Escanaba and Lake Michigan Transportation Co.'s line for the coming season will be as follows: Steamer Escanaba Captain R. W. Hayes master, Wm. Jones engineer; steamer Inter Ocean, Captain Geo. E. Merritt master, Patrick Neville engineer; steamer Argonaut, Captain Wm. Chamberlain master, Mr. Welch engineer; steamer Rhoda Emily, Captain Jas. W. Brion master, A. Nelson engineer.

Captain J. Q. Owen has been appointed master of the steamer Ira H. Owen, and Chas. B. Calder engineer.

Messrs. Davison & Holmes, of this city, have sold the schooner Lottie Cooper for H. Smith et al, to Oley Grob, of Sheboygan, Wis., for the sum of $8,000.

Mr. Thomas Bagley, the well-known boat builder of this city, who carries on business at Randolph street, near the bridge, has contracted to build a steam launch for Mr. Gary French, for use in Fox lake, Wis. She will be 50 feet over all, 9½ feet beam, and 4 feet depth. He also has contracts for one 30-foot mail and supply boat for the Beaver island life saving station; one cedar surf-boat for the Frankfort life saving station; one cedar surf boat, 27 feet long, for the Two Rivers life saving station; nineteen steamboat yawls, and three schooner yawls. He has so much to do at present he hardly knows what piece of work to commence on first, and feels the need very much of more room and better working facilities.

We call attention to the cut of the Goulds & Austin centrifugal wrecking pump. Messrs. Goulds & Austin build these pumps in sizes from 6 to 12 inches. The 6 inch pump has a capacity of 2600 gallons per minute, and the 12-inch pump a capacity of 10,000 gallons per minute. This firm, and their predecessors, have been in the pump business for more than a half century; their long experience in this particular branch of the trade is a sure guarantee of the quality of the goods they build. They have placed a great many wrecking pumps on the lakes during the past two years, and are now putting twenty of these pumps through their shops. They also handle a full line of pipe and fittings, brass goods, steam hose, etc. Their stock is one of the largest carried in the west, and they are in position to fill all orders promptly. Their general offices are at 167 and 169, Lake street, Chicago, Ill.

The new iron ore dock, under construction at Escanaba by the Chicago and Northwestern R. R. Co., will be sufficiently completed for vessel use by the opening of navigation. It is 1900 feet long, with 250 pockets with a capacity of 125 tons each. It is 7 feet higher than the other three docks at that port, having a sharp slope on the pockets enabling vessels to load more speedily than at any of the other docks. There are 6,000,000 feet of timber in this structure, and when finished it will be the most complete thing of the kind to be found in the upper peninsula.

The Chicago Dock and Dredging Co. have put in the foundation, and as soon as the weather will permit, will also begin work on the new lumber dock, building by the same company. It is to be 2,000 feet long and 60 feet wide. The C. & N. W. R. R. Co. have also built forty miles of new road in that country during the past winter.

Mr. Davis, of the Chicago Dock and Dredging Co., has just returned from a flying visit to Escanaba. He reports the weather warm and mild, and just the kind to soften up the ice. They are looking for an early opening of navigation this spring.

Chicago has a fire boat service which is undoubtedly the most effective and complete of any port on the lakes, and it would be well if some of her sister ports would take as much pains to protect their marine interests against loss and damage by fire. There are in this service two large tugs, the Geyser and the Chicago. The former is a strongly built, powerful boat, 95 feet keel, 105 over all, 23 feet beam, and 10 feet depth, built by the Miller Bros., of this city, especially for this use. Her power consists of one pair of overhead-acting propelling engines with cylindets 18 by 20. Her pumps are of the vertical, duplex type, direct acting, with steam cylinders 9 inches in diameter and 10 inches stroke, and two water cylinders 9 inches diameter and 10 inches stroke. Double acting Scotch type boiler, 11⅔ feet shell by 16 feet length. The Chicago is a good sized tug, bought by the city for use as a fire boat; is 87 feet over all, 75 feet keel, 16 feet beam, and 9 feet depth. She is equipped with a high pressure engine 18 by 22, built by Donaldson & Polley, of Buffalo, and has four pumps 6 inches diameter and 12 inches stroke, with a water power of 2,327 gallons per minute. The Geyser is commanded by Captain W. Pembleton, P. J. Falvey lieutenant. The Chicago by Captain Wm. Cowan, and Wm. J. Sweeney lieutenant. During the past year they have between them attended 180 alarms, working on that number of fires, have traveled 359 miles, and worked 114½ hours fighting fires. During the past winter the Geyser, being especially adapted to the work, having been built with a spoon-shaped bow with that idea in view, has been of inestimable service in breaking the unusually heavy ice which has been a source of trouble and annoyance here. Had it not been for the ability of the boat to cope with that evil the city would have been in danger of a water famine more times than one. When the tug Hackley was disabled in trying to get to the crib, the Geyser proved herself equal to the emergency, plowed through ice from 19 to 29 inches in thickness, and rendered the timely assistance necessary to keep the city in water for daily use. And again, at another time when a gorge of ice formed in the river threatening an overflow which would have caused incalculable disaster and damage, the invincible Geyser successfully broke the gorge, averted the danger, and ten times over paid for herself and sister tug; which facts prove that such a boat with such equipments is never an expense to any city. The Geyser during the winter is kept at the foot of La Salle street, in order to be close at hand in case of any trouble at the crib; during the summer her headquarters are in that part of the city central to the lumber districts where she may be prepared to do her effective work in case of a fire in the large lumber yards. The crew have neat, comfortable quarters in a 30 by 40, one-story building at the foot of La Salle street, which contains an office, sitting room and bunk room. They are a fine, manly-looking lot of men, gentlemanly and courteous, and have proven themselves equal to their work many times.

Mr. George T. Arnold is building extensive coal docks at Mackinac Island, and is going to establish a coaling station at that point for boats. This should be borne in mind by steamboat men.

The steambarge New Era is having a new cabin aft in place of the one she formerly had in her hold.

F. & P. M. No. 1 is laid up for repairs.

At the Milwaukee shipyard there is building for a Milwaukee syndicate a new steambarge, the same size as the Omaha, 215 feet keel, 32 feet beam, 26½ feet depth. Will have fore and aft compound engines, 21 and 40 by 40.

Early on Saturday morning Officer P. J. O'Brien heard five shots in the direction of Allen's slip, near Center avenue, and on arriving at the slip he found that Captain Harris Acree, of the steambarge Worthington, had fired his revolver to bring help to a man who was struggling in the river. Pushing a plank to the drowning man, O'Brien ran for help, but the man had sunk before it arrived. The body was found by the police on Saturday evening, and proved to be that of Albert Leppert, 38 years of age, and living with his sister at 575 West 21st street. He had been robbed, and the supposition is that he accidentally walked into the slip.

HOPKINS.

MT. CLEMENS.

Special the Marine Record.

B. Whittaker & Son have sold the barge Banner to W. Daly and R. Shook; consideration $3,000. She will go in the steambarge Missouri's tow, which will be commanded by Captain Webb the coming season.

A new steam yacht is building here for Mr. Agnew, proprietor of the Avery House. She will run on excursions between here and St. Clair Flats and other places, and will carry 150 passengers. Her dimensions are: Length of keel 72 feet, beam 13 feet, depth of hold 6½ feet, over all 84 feet, length of main cabin 22 feet, forward cabin 18 feet. All finished with mahogany, cherry and red cedar, and will be cushioned with the finest material, and have mirror panels. The model is by Balou, and building by J. Thubarth and J. Walter. Her boiler is steel, 5 by 8, built by Detroit Drydock Co. Her engine is compound, 10 and 18 by 12 inch stroke, built by the Fulton Iron Works of Detroit. She will be completed the last of march, will cost about $14,000, and will be named the Roberts.

L.

LORAIN.

Special to the Marine Record

The little schooner West, changed hands here last Thursday.

The owners of the steambarge R. P. Thew, are making a double decker of her. She is also getting calked from the light water mark up. The barge Galatea has also been calked.

The schooner Three Brothers, has received new decks.

The little schooner Polton, is getting an overhauling.

They are building a small steambarge for the stone trade and also a fish tug for Cleveland parties at Root's yard here and every one is full of glee at the prospects of a drydock starting here.

C. B. GARDNER.

MARITIME LAW.

AGENT OF VESSEL—STIPULATION FOR VALUE SIGNED BY AGENT—SUIT DEFENDED BY HIM—LIABILITY OF AGENT FOR INTEREST ON STIPULATION.

U. S. District Court, Southern District of New York.

The agent of a vessel libeled who has appeared in the suit and signed a stipulation for value, and thereafter defended the suit, is liable for interest on the face of such stipulation.

Brown, J.

The bark in question being British and her owners resident abroad upon her arrest by the marshal. Leonard & Florez, the ships agents here, intervened as agents of the owners and filed a claim on the owners behalf. They executed a stipulation for the agreed value of the vessel, appeared in the cause and in November, 1885, interposed an answer in behalf of the owners and signed it in their own names as respondents. The result of the trial shows that the libelants are entitled to a greater sum than the amount of the stipulation. The libelants claim the right to enter a decree for the amount of the stipulation, with interest thereon, from the day it was filed, on the ground that the obligors therein, by personally appearing and making themselves parties to the record, and defending the action, are responsible for interest on their stipulation during the time that they have delayed the libelants in obtaining their rights. See Rule 10, supreme court; Rule 71, district court.

The respondents contend that it being plain that the obligors signed the stipulation as sureties only and acted only as agents of the absent owners in the defence, there is no reason for charging them personally with what is legally only the act of the principal, or for holding the sureties beyond the face of their stipulation. As bearing on this question, the respondents have moved to amend their answer, *nunc pro tunc*, by adding after their signatures as "respondents," at the end of the prayer for relief, the words "as agents as aforesaid."

Although the affidavits on which this motion is made do not show that the agents had no personal or pecuniary interest in the defence, all the papers do sufficiently show that they designed to act as agents only; and in order that no mere form of words, or accidental oversight, may be deemed to affect the question as to the extent of their liability, I think the motion should be granted, *nunc pro tunc*, as of the date when the answer was filed.

But with the amendment granted I still think the stipulators are responsible for interest on the face of their stipulation. I cannot distinguish the case from that of William Stover, 1 Curtis, 203, in which Mr. Justice Curtis held the stipulators responsible, who, as in this case, intervened and defended as agents of absent owners. In his opinion he examines the question in all its aspects, and holds the agent liable as the only person before the court, over whom the court can have any control; as the *dominus litis* delaying the libelant by his personal appearance and defence, though acting as agent only, (The Dundee 2 Hagg, 137, and as being on the ordinary rules of law, personally liable for his acts in behalf of a foreign principal. See the Suliote 23 Fed. Rep. 919; Berwind v. Schultz, 25 do. 912, 919.

The responsibility of the agent or surety as a principal, for interest on his stipulation, when he thus "appears and defends," has been recognized by the supreme court in the case of the Wanata 95 U. S. 612, and the Maggie J. Smith, 123 U. S. 356. The decree should, therefore be for the amount of the stipulation with interest from the time it was filed, with costs.

January 18, 1888.

AMERICAN SHIPPING.

Mr Bates, manager of Lloyd's Register in a recent article refers to the condition of American shipping during the six years of free trade between 1783 and 1789 when British goods filled all the shops and British ships carried all the coin to England, Great Britain had gotten the trade of America almost wholly into her hands when the constitutional government began. On the 4th of July, 1789, congress laid the foundation of the merchant marine by enacting that only home built ships could be sailed under the American flag, and giving to ship owners protection by discriminating dues on foreign tonnage. The growth of the merchant marine was wonderful. In one year the tonnage increased from 123,893 tons to 346,254 tons. In two years it trebled, in five years nearly quadrupled, in nine years nearly quintupled. In 1810, twenty-one years after congress passed the first protective laws, the tonnage in the foreign trade was 981 019 tons, or about what it is now, and it carried at least 90 per cent of American commerce. In 1815 the removal of protection to American merchants and ship owners began, and the decline of the merchant marine followed. In 1843 American vessels carried but 77 per cent of American commerce. During the sixty years since 1828 there has been practically no tariff protection, and but for the navigation law which provides that American vessels must be home built, our merchant marine would have been wiped out almost entirely, and the insignificant 15 per cent of our foreign trade which we now do would have gone to British ship owners.

Mr. Bates shows that of the twelve principal maritime nations the United States stands tenth in the percentage of tonnage in their foreign trade. Russia comes next with about 10 per cent, and Portugal next and last with 5 per cent. In conclusion he says:

As we have seen, foreign flags are now carrying 85 per cent of our exports and imports. In the infancy of the republic, when they were carrying only 40 per cent. Thomas Jefferson advised that two-thirds of this percentage be "resumed by our own people." With that resumption we could carry 86 per cent. The advice was taken. Tariff protection brought about the resumption, and for forty years Mr. Jefferson's idea, in 1791, was realized. Then this protection was removed, and in sixty years his figures have been completely reversed.

The millions we have lost by the change of policy, from protection to reciprocity would more than build the British mercantile navy. We may form a fair estimate of what may be gained by a partial resumption of our transportation by computing the average percentage of value which it adds to commerce. At the present time I would fix this augmentation at 15 per cent for exports and 10 per cent for imports, making 25 per cent of value carried for the average earning and saving power of a merchant marine in foreign trade. This is not to the owners, but to the nation or state carrying on the business. To comprehend the importance of "resuming" holding and exercising this power, let us assume that, to balance fairly towards the world accounts of our foreign commerce, and navigation, making no gains nor losses, our own shipping should do half of the outward and inward transportation.

On this basis, taking the year 1883, when our exports amounted to $828,883,333 and our imports to $722,865,281, I find that we paid foreign ships $21,147,732 for import carrying, and $45,402,417 for export carrying, and in the total $66,550,149 for work our own shipping should have done to have completed its half share of the business.

But if we figure upon the basis of Great Britain's participation in her own transportation, namely, 73 per cent instead of half, then we paid foreign ships and steamers $138,804,596 for work properly belonging to a marine of our own.

It may be set down, then, that from seventy to one hundred and forty millions of dollars are paid annually by the people of the United States to foreign nations for ocean freights that should be earned and saved by the maritime states of the union, comprising the greater part of the republic. In making up the balance of trade with foreign nations, we must settle the adverse transportation account with the products of the farm, the forest or the mine, with manufacturers or money. He is a blind economist who cannot see that our merchants and their ships should do their proper part in contributing the fruits of enterprise and employment for the gain and advantage of the whole country. Whenever we fall in debt abroad a cry goes up for an increase of exports or of import duties; but nobody seems to think if we had a merchant marine doing its proper work it would be adding to our foreign credit from seventy-five to one hundred and fifty millions of dollars annually by ship building, navigation, and commerce. This enormous business, with its wealth producing power, lies at our feet. It is opulence and independence to possess it. It belongs to us by right. We formerly held it in hand. It is our duty to resume it. Justice to the maritime states, prosperity and safety to the nation, demand this policy of the government.

INTERNATIONAL MARINE CONFERENCE.

Mr. Perry Belmont introduced in the house of representatives on February 2d, a bill "to provide for an international marine conference for securing greater safety for life and property at sea." Following is the text of the bill:

SECTION 1. That the president of the United States be and he is hereby authorized and requested to invite the government of each maritime nation to send delegates to a marine conference that shall assemble in the city of Washington on the first day of October, in the year 1888, or such time and place as he may designate, to appoint five delegates to represent the United States at said marine conference and to fill vacancies in the number.

SEC. 2. It shall be the object of said marine conference to revise and amend the "rule of the road at sea" and the international code of fog and night signals; to adopt a uniform system of marine signals or other means of plainly indicating the direction in which vessels are moving in fog, mist, falling snow and thick weather and at night; to compare and discuss the various systems employed for the saving of life and property from shipwreck, for reporting, making, and removing dangerous wrecks or obstructions to navigation, for designating vessels, for conveying to mariners and persons interested in shipping warnings of approaching storms, of dangers to navigation, of changes in lights, buoys and other day and night marks and other important information, and to formulate and submit for ratification to the governments of all maritime nations proper international regulations for the prevention of collisions and other avoidable marine disasters.

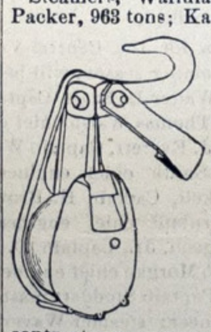
SEC. 3. The sum of ——dollars is hereby appropriated out of any funds in the treasury of the United States not otherwise appropriated for the necessary expenses of said marine conference, including the pay and allowances of the representatives of the United States therein, who shall receive the same pay and allowances as members of the house of representatives in the congress of the United States.

A REMARKABLE RECORD.

The Cleveland Block Company, although only in the fifth year of its existence, has a record of which many older organizations might be proud. The excellence of their product, which was the result of careful and long continued experiment, commanded from the first the attention of vesselmen, who well know the importance of that feature of a ship's outfit. The principal advantages claimed for the Cleveland tackle block are extreme strength, combined with lightness and durability, simplicity of construction, and such cheapness as is consistent with the most careful workmanship. The sides, or shell pieces, being concave-convex, give the utmost lateral resistnace with a minimum weight, while the other parts are made of metal in the most careful proportions.

The result has been a rapid increase of orders both on land and sea. In response to a late inquiry, the secretary of the company informs the MARINE RECORD that outfits have been placed upon the following well-known craft, to any one of which the company points with pride and refers with confidence:

Schooners, Golden Age, 1764 tons, net; Henry A. Kent, 733 tons; David Wallace, 1035 tons; John Shaw, 882 tons; Wadena, 1022 tons. Steamers, Wallula, 1416 tons; H. E. Packer, 963 tons; Kasota, 1274 tons; George Spencer, 1134 tons; Kalkaska, 555 tons; William Chisholm, 1246 tons; Spokane, 1465 tons; C. Tower, Jr., 1548 tons; Sitka, 1227 tons; Missoula, 1585 tons; Bulgaria, 1486 tons; Aurora, 1585 tons; Yakima, 1658 tons. Partial outfits have also been placed upon the schooners Nellie Redington, Scotia, Our Son, and many others, while contracts are numerous for outfits to be delivered this season.



DREIN METALLIC LIFE BOATS.

The following list of metallic life boats are being made by Drein & Son, Wilmington, Delaware: Three 20 feet metallic life boats for Cleveland, O., beside the two 20 feet boats just delivered to the Globe Iron Works Co., of this city. four 22 ft. metallic life boats for N. J. C. R. R. steamer, one of Cores patent life rafts for N. J. C. R. R. steamer, one of Cores patent life rafts for N. Y. P. & N. R. R. steamer, four 20 ft. metallic life boats for Maryland steamers, one 20 ft. metallic life boat for steamer Gazelle, 100 cork life preservers for str. Gazelle.

ASHLAND'S BIG FURNACE.

The first blast furnace ever built in the northwest, and the largest charcoal furnace in the world, is now completed at this point and is preparing to begin the manufacture of pig iron. The projectors are A. H. Hinckle of Cincinnati, W. H. Hinckle of Minneapolis, and James E. York of Ashland. The capitalists interested came here and located their choice of ground, receiving a bonus from the city. They then purchased a large area of hardwood lands in the immediate vicinity for the manufacture of charcoal. The ninety-ton furnace will require 3,600,000 bushels of charcoal annually. For the purpose of providing this large purchase of hardwood timber lands and stumpage were made. To obtain so much charcoal annually 1,825 acres must be cleared, or five acres per day, equal to three square miles of forest. Sixty charcoal kilns have been constructed along the Wisconsin Central railway and the Milwaukee, Lake Shore & Western. These kilns in construction alone required 2,500,000 brick, 600 cords of stone, ninety tons of castings, and forty-five tons of wrought iron. The kilns are thirty feet in diameter, seventeen feet high, with a capacity of 60,000 bushels of charcoal annually. The casting house is 50x130 feet, with a steel shaft brick lined chimney 150 feet high. The boiler house is 35x40 feet in size, with three 150 horse-power boilers fired by the waste gas from the furnace. On the top of the engine house is an immense steel tank holding 76,000 gallons of water. As 300,000 gallons are needed daily, pump works with a capacity of 1,000,000 gallons daily are located in Lake Superior, connected with a reservoir holding 3,500,000 gallons. A 400 horse-power Corliss engine is in use. The blast itself eats 140 tons of ore, 8,000 bushels of charcoal, ten tons of lime, and 16,000,000 cubic feet of hot air daily to produce ninety tons of pig.

THE STURGEON AND THE DEER.

"I was over on Big Sturgeon Lake looking for a duck or a goose for dinner, when, just as I paddled my skiff around a point, I saw a deer's horns sticking out of the water near the shore. I thought it was a deer swimming across the lake, and without stopping to look, blazed away. I heard some of my shot strike the horns, and then saw them go under. I thought that singular, but after a while saw them come up again half a mile off. The idea of a deer swimming that far under water was a paralizer. I rowed out cautiously to the horns and found that they were sticking out of a sturgeon's mouth. He had swallowed the deer, but had no room for the horns, and was waiting until he should have digested the animal so he could spit out the horns. I recognized the sturgeon at once as 'Gros Ventre,' a fish I had known ever since I took my claim on the island. He was named by a priest who had been a missionary among the Indians in Montana. The fish recognized me, and his eye winked as he rolled up to have a look at me, and his silvery sides sort of rippled, as if he was trying to laugh. He evidently realized the ridiculousness of his situation, but he probably found it was uncomfortable swimming around with the horns under water, and so turned over to rest. Now, the gastric juices of the sturgeon are powerful. I have known them to dissolve an ax which a sturgeon had swallowed—"

"Give us one story at a time," exclaimed several of the listeners.

"Well, as I was going to say, it would not take the sturgeon long to digest the horns of a deer, but I did not like to see an old acquaintance in such a fix, so I cut the horns off, and blessed if old 'Gros Ventre' did'nt swim out a piece and rise up about five feet clean out of the water and make me one of the gracefulest bows you ever saw, and then he leaped his whole length out of the water and came down with a splash which sent the ripples circling to the farthest shores of Big Sturgeon lake."

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TUG WM. E. ROONEY—12 by 12, 100 lbs. of steam, draws 5 feet 4 inches. SYRACUSE—12 by 12, 100 lb. of steam, draws 6 feet. For further information inquire of SULLIVAN & HUBBARD, Toledo, O

FOR SALE

THE powerful tug J. W. Bennett. Length over all 95 feet, breadth 17 feet, depth of hold 9 feet, draws 9 feet of water. Engine 22 by 24. For prices and information address SANDUSKY STEAMBOAT & FISHING CO., Sandusky, Ohio.

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THE TUG CAL DAVIS—Over all 65 feet, beam 14 feet, depth of hold 6½ feet, draws 7 feet of water. Has boiler allowed 90 pounds of steam, outboard shaft (no engine.) All in good condition. Price, $1,200. For further information address HENRY LAY & CO., Sandusky, Ohio.

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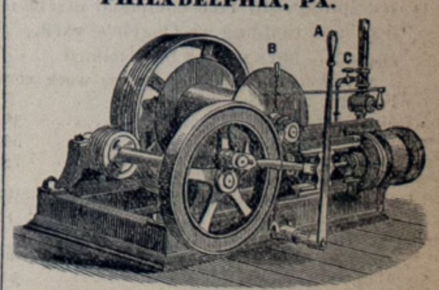

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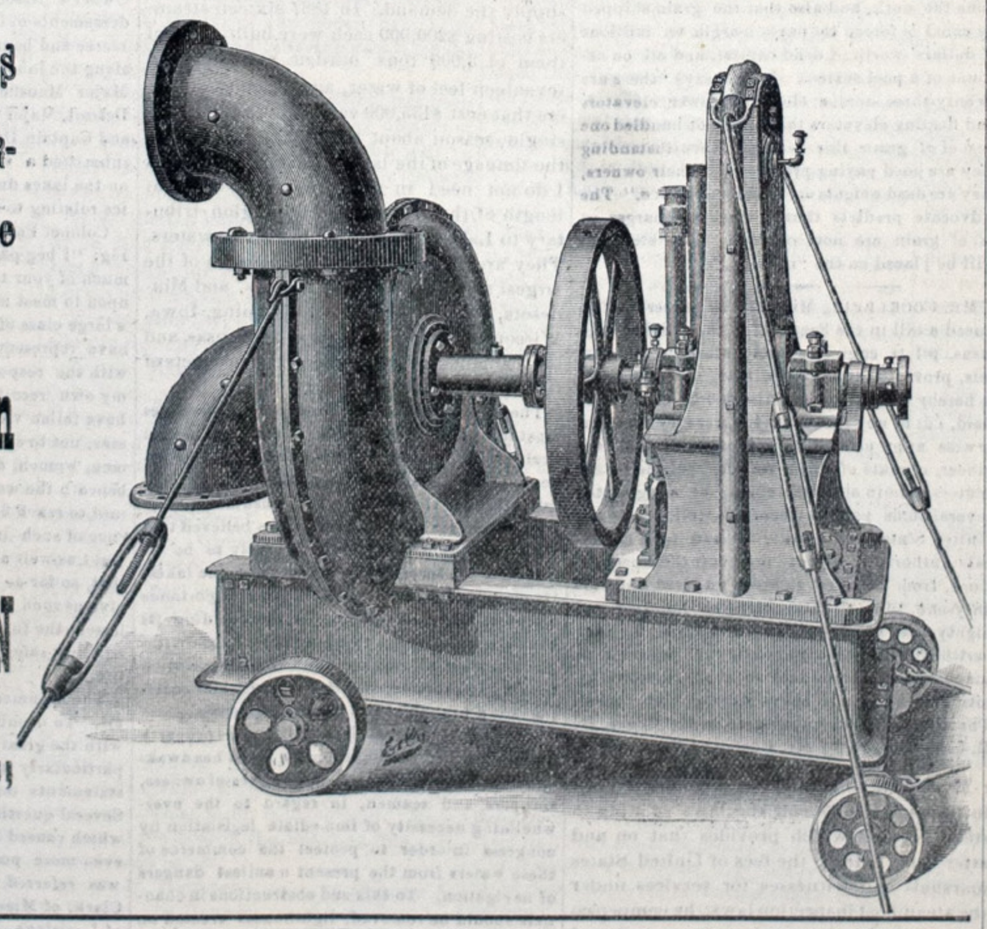

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Subscribers and others are respectfully invited to use the columns of the MARINE RECORD for the discussion of pertinent topics.

Entered at the Post Office at Cleveland as second-class mail matter.

CLEVELAND, O., THURSDAY, FEB. 23.

NAVAL ADVISORY BOARD.

There is a growing feeling of disgust in maritime circles at the nonsensical waste of moneys which are annually thrown away under the present system of grants for the improvement of harbors and rivers, and with this knowledge comes the iron-bound fact that no person individually, nor any regularly constituted body, working collectively as a bureau, board, or committee are directly responsible for such abortive legislation.

In the meantime appropriations have been brought forward, and in some cases which have recently been made public, the location or object for which the grant had not been given could not be found or determined even by the oldest inhabitant. And yet these very appropriations must have been engineered and steered along through the various channels to a committee having the interests of the country at heart, and that body, judging from the statements, etc., placed before them, and the apparent necessity for the outlay, have attached their signatures to a document which, in due course of time, becomes effective, and a one-horse place, away back behind of nowhere, is, perhaps, benefited pro tem, while at least a moiety of the country's wealth is frittered away in improvements which, in many cases, will not make any adequate returns, except in the mind of a visionary looking towards the bright and glorious future of a century hence. While in other cases trust monopolies and combinations and private persons have experienced material advantages frequently in opposition to the interests of the majority.

We believe the opportune moment has at length arrived when, by a united and vigorous agitation of this important subject a new departure can be taken and a better state of affairs inaugurated by the adoption of a naval advisory board, invested with power to regulate all matters relating to or appertaining to marine affairs, legislation, the building and equipment of naval vessels, the location of forts as a means of defending harbors, the making and revising of charts, rules of the road, and other important and professional services.

The majority of the board or bureau should consist of men who have been in active service for a certain stated period of time, and who, by their special qualifications and training would be competent to take under advisement any legislative functions in connection with our maritime interests.

Such a board would lighten the labors of the secretary of war and restore the prestige of our mercantile marine to its own proper level, while the wide interest already expressed in the formation of the proposed naval reserve forces would be fostered and encouraged by men who understood the needs and the requirements of this important branch of our national defence. Admitting the wide difference between military and naval affairs, as all candid minds will readily do, and to give honor where honor is due, which of the professions ought to stand foremost in personal and distinctive features of bravery and professional skill? The verdict of each and every impartial mind would be that they are equal in their national and official capacities. Well knowing that while our troops stand ready to protect our homes on land, our navy is upholding the honor and dignity of the United States afloat, and guarding our foreign treaty rights and the commercial interests of our subjects abroad, and, with devoted patriotism, holding her ground on the China seas, the Indian, the Atlantic and Pacific oceans, and is second to no other naval power afloat in point of scientific skill and practical discipline.

Hence, why not acknowledge in a political sense a fair proportion of our naval talent and allow marine men to have a voice in our national and maritime affairs, and in rebuilding the industry whose requirements they have been trained up to acknowledge and respect.

Since writing the above, we have studied some of the clauses, of the bill introduced by Senator Cullom, and believe it to be, on the whole, a step in the right direction, but, according to our humble opinion, does not reach out just where it ought to, for after showing the necessity of establishing an advisory board, and clearly indicating the past waste and extravagance of the national finances in the grants and appropriations, it still leaves the proposed board of advisers directly under the same influences and control as it had been hitherto, *viz., non professional.*

While cheerfully admitting the merits, the efficiency, and the vast resources of the war department, and the ability and skill displayed by the various members of its staff, we still are inclined to believe that there must be a corresponding amount of talent to be found in our nation's twin offspring, the navy. And that this is so the past achievements and the present executive efficiency of our floating territories amply testify, and while the majority of our readers have had ocular demonstration of the above facts, the younger members of the community can find historical records to substantiate them, and it would seem to be in accordance with the law of the survival of the fittest to liberally admit and allow our qualified ocean children a power in regulating the political and commercial economy and control of their adopted and professional element.

THE Canal Advocate says that the report of the Buffalo Merchants' Exchange Weighmaster at Buffalo, giving the amount of grain received and transferred by each elevator at that port for the past year, shows conclusively that one-quarter of their pool's forty-four elevators could have transferred all the grain passing through that port last season. The city elevator alone transferred over one-sixth of the grain, thus showing that six of the forty-four could have done the work, and also that the grain shipped by canal is forced to pay a margin on millions of dollars' worth of dead capital, and all on account of a pool system. It also says "there are twenty-three storage elevators, tower elevators and floating elevators that have not handled one bushel of grain this season. Notwithstanding they are good paying properties to their owners, they are dead weights on "canal commerce." The Advocate predicts that if transfer charges on canal grain are not reduced, more elevators will be placed on the "idle list."

MR. COCKERELL, Missouri, by request introduced a bill in the Senate, for the relief of captains, pilots, engineers, and mates of steam vessels, providing that the secretary of the treasury is hereby authorized and directed to cause to be paid, out of any money in the treasury not otherwise appropriated, to any captain, pilot, engineer, or mate of steam vessels, their heirs, executors, administrators, agents or assigns, the several sums paid by them respectively to the United States as a license-fee and for a certificate authorizing them to prosecute their occupations, from May first eighteen hundred and seventy-one, to April fifth, eighteen hundred and eighty-two, less the sum of fifty cents for each certificate of license issued by the inspector or inspectors of steamboats to such captains, pilots, engineers, and mates during said period. The same Bill was introduced in the House, H. B. 5031, Jan. 16, by Mr. Phelan of Tennessee.

MR. FRYE, of Maine, has introduced a bill in the senate to amend the laws relating to steam vessels which provides that on and after July 1, 1886, the fees of United States marshals and witnesses for services under the steamboat inspection laws, the compensation of clerks to steamboat inspectors and all other expenses of steamboat inspectors, provided for in section 4461 of the revised statutes, shall be paid for under direction of the secretary of the treasury, out of any money not otherwise appropriated, instead of from funds heretofore collected from the inspection of steam vessels and the licensing of the officers of such vessels.

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MARINE RECORD—OFFICIAL PAPER.

ADDRESS OF HON. R. C. PARSONS.

WASHINGTON, February 17.

The house committee on commerce to-day gave a hearing to Hon. Richard C. Parsons, of Cleveland, representing the Cleveland Vessel Owners' Association, in favor of needed improvements in lake navigation. There were present during Colonel Parsons' speech Congressmen Ezra B. Taylor, and Romeis, Hon. George H. Ely, of Cleveland, and Captain Whiting of Detroit. In opening his remarks Colonel Parsons said: "I have the honor to present to you the report of the Vessel Owners' Association, of Cleveland, O., recommending certain legislation by congress to provide, as far as practicable, against the future of life and property in the navigation of the great lakes. This report has been carefully reviewed by the vessel owners and the boards of trade of many cities upon the lakes, and cordially indorsed by them. I present to the committee copies of their various resolutions. The improvements asked by this report lie between the ports of Bufialo, on Lake Erie, and Duluth, on Lake Superior. Lake Erie is 250 miles long by 60 miles wide; Lake Huron is 270 miles long by 105 broad; Lake Michigan, 345 by 84 miles and Lake Superior 390 miles long by 180 in width. The distance from Buffalo to Chicago, is 865 miles; from Buffalo to Duluth more than 1,000 miles. To illustrate the growth and marvelous development of this part of our country, it is only necessary to say that the annual commerce transported over these lakes surpasses in value the entire foreign commerce of the United States. Ten years ago it was intelligently stated that the annual value of the lake commerce had reached the sum of $1,000,000,000. The whole number of sail, steam vessels, and barges upon the lakes is 3,405. The extraordinary development of the Lake Superior traffic has stimulated vessel builders so that at this moment the resources of every shipyard are strained to their utmost capacity to supply the demand. In 1887 sixteen steamers costing $200,000 each were built, some of them of 3,000 tons burden and drawing seventeen feet of water, and nineteen steamers that cost $135,000 each, thus adding in a single season about $6,000,000 in value to the tonnage of the lakes in steam craft alone. I do not need in this presence to speak at length of the resources of the region tributary to Lake Superior and her sister waters. They are familiar to you all. Seven of the largest states touch their borders, and Minnesota, Dakota, Montana, Wyoming, Iowa, Wisconsin, Colorado, Nebraska, Kansas, and the Canadian provinces send the products of their soils over these waters.

The larger part of the products of the states must find their way to eastern markets almost exclusively by way of lake navigation, the expense of shipment of ores, lumber, etc., etc., by rail being far too great for the consumer or foreign purchaser to encounter. It is believed that the attentention of congress has only to be directed to the increasing commerce of the lakes, its magnificent extent, and the vital importance of protecting, developing, and extending its beneficient influence to secure from that distinguished body all rational and needed legislation tending to promote, encourage, and foster so important a branch of our national interests.

"The unprecedented loss of life and property during the past season upon the lakes has awakened the deepest concern, both of vessel owners, shippers, and seamen, in regard to the overwhelming necessity of immediate legislation by congress in order to protect the commerce of these waters from the present manifest dangers of navigation. To this end obstructions in channels should be removed, lighthouses erected on dangerous coasts, fog signals established, buoys properly placed; life saving stations suitably located, as may largely prevent a recurrence of the disastrous losses of the last season. During the year 1887 seventy-three vessels were totally lost, aggregating 20,867 registered tons, sixteen of which were steamers. The loss of property was in excess of $2,500,000. The loss of life, including passengers, women, and children, was 204. There were 185 serious accidents, including the above total losses, ranging in value of property destroyed from $1,000 to $135,000 each. About $50,000 was lost in minor mishaps, ranging from $100 to $1,000 in each case. It will be seen that nearly one thousand vessels met with more or less injury during the season. During the last eight years there have been 524 vessels totally lost, aggregating 150,262 tonnage, valued with cargoes at $6,000,000, and 1,960 lives. Of the 175 serious losses the past year, seventeen vessels were sunk, eight were burned, eleven foundered at sea, sixteen collided, and the remaining number got ashore. The minor mishaps were caused by collisions and getting ashore, owing largely to defects in the channels and lack of fog signals and lighthouses at dangerous places. It is believed that a large share of these disasters, involving so much of private suffering, so many desolate homes, and property destroyed, can be traced directly to the lack of suitable securities for lake navigation and the absence of proper buoys, lighthouses, fog signals, harbors of refuge, and sufficient depth of water in channels through which all vessels doing business with the upper lakes must necessarily pass. The most skillful seamanship, the strongest vessels, and ablest crews are powerless in the black nights, in violent gales, in blinding fogs and driving snow squalls to wholly prevent disasters, when aided by the most devoted efforts of crews to furnish every facility for safe navigation. But much can be done to aid the mariners in their dangerous calling by providing as far as possible such safeguards as will largely prevent the appalling destruction of life and property suffered during the last ten years.

"The necessity for most of the legislation asked for arises from the vast and increasing commerce of the lakes and the use of a larger class of vessels for the carrying trade. Some of the steamers now in active use are 350 feet long, 40 feet beam, and 25 feet in depth. They not only carry an enormous freight, but are compelled to tow one or more barges heavily laden. It will readily be seen that thus crippled in fogs, or storms, or darkness, these barges must be carefully protected and the lives and property on board sacredly guarded. Hence, the absolute want of plenty of sea room, sufficient depth of water, friendly lighthouses, fog-horn to warn them from dangerous shores, and channels of sufficient width and depth to make navigation comparatively free from needless perils."

Colonel Parsons pointed out in detail the various projects deemed by the vessel men as necessary to make navigation of the lakes more secure. He then went on to say: "I have been compelled to enter somewhat into detail in order that the committee may be intelligently informed of our needs. There has been no desire on the part of those I represent to burden congress by asking great appropriations, or in any manner seeking to exaggerate the evils we desire you to remedy. The awful loss of life and property for the last ten years upon these lakes tells the story of disaster that human aid has, so far, been unable successfully to meet." Colonel Parsons read a statement signed by thirty-seven masters of vessels at Cleveland, all of whom he said he knew personally, and many of them he had consulted relative to the object of the hearing, indorsing the report of the Vessel Owner's Association. He also presented endorsements of the same from chambers of commerce and boards of trade of nearly every city along the lakes as well as from General Poe and Major Mansfield, the government engineers at Detroit, Major Overman, in charge at Cleveland, and Captain Davis, located at Milwaukee. He submitted a statement giving all the disasters on the lakes during the past season with statistics relating to each vessel.

Colonel Parsons closed his argument by saying: "I beg pardon, gentlemen, for taking so much of your time, but you will rarely be called upon to meet matters of more real importance to a large class of your fellow citizens than those I have represented. I am solemnly impressed with the responsibilities of my trust. Within my own recollection more than 5,000 seamen have fallen victims to the perils of these island seas, not to speak of a host of helpless voyagers, men, women, and children, who have gone down beneath the waves. The property destroyed is said to reach $40,000,000 in value. In the presence of such impressive facts, we deem it our right as well as privilege to come to you to ask that, so far as lies within your power, you will give us such needed legislation as may largely lessen the future destruction of property and add new safeguards for the protection of human life."

The argument made a good impression upon all. To members of the committee unacquainted with the great importance of the lake commerce, particularly those from the south, some of the statements made appeared simply marvelous Several questions were put to Colonel Parsons, which caused him to reiterate his statements in even more positive terms. The whole matter was referred to a sub-committe, composed of Clark, of Missouri, Boyce, of New York, Logan, of Louisiana, Davis, of Massachusetts, and Anderson, of Kansas.

MEETING OF THE CLEVELAND VESSEL OWNERS' ASSOCIATION.

At a meeting of the Cleveland Vessel Owners Association, held February 22d, 1888, the following resolutions were adopted:

WHEREAS, House bill 6948, entitled "A bill to prevent the overloading of vessels and boats on the great lakes, etc., introduced by Mr. Nutting, of New York, is of such a character as to call for the positive and active opposition of all interested in lake marine.

Resolved, That the remedy and system provided by this bill are crude, indefinite and uncertain; that the officers to be appointed under it would be clothed with arbitrary and final power; that such power conferred on individuals, practically unaccountable to any one would be dangerous and mischevious, and would lead to acts of injustice and oppression in individual cases, and would incite corrupt practices.

Resolved, That it is the sense of this association that the government should move vigorously but with judgment and consistency in the matter of preventing overloading, and that reasonable and sufficient safeguards should be provided for the safety of the crews on sailing vessels similar to those required of steam vessels of the United States.

Resolved, That no such arbitrary and irresponsible power should be conferred on individuals as the bill under discussion contemplates, but that a definitely ascertained load line be established and conspicuously indicated for each vessel, and that due provision of life preservers and boats be required for the safety of the crew; and that to this end the existing system of inspection of steam vessels be extended so far as applicable to include sailing vessels, and such additional power and duties be given the local inspectors as may be necessary for this purpose.

Resolved, That in many inspection districts in the United States no additional local inspectors would be required and that in such districts as would require additional local inspectors or assistants, such should be appointed; and that the whole matter be thus placed in the control of an established branch of the government service, affording in proper cases the right of appeal as in other inspection matters.

Resolved, That copies of these resolutions be sent to our senators and representatives in congress and that they be urged to oppose vigorously the proposed bill, No. 6948, and that they be required to secure proper legislation on the subject.

WHEREAS, House bill 6135 has been introduced in the national house of representatives at the present session entitled "A bill for the better protection of human life on merchant steam vessels of the United States, providing (under severe penalties) that the maximum hours of labor for a licensed officer, as prescribed by law, shall be twelve hours in each twenty-four;" and

WHEREAS, The effect of such a law in operation would be in every prolonged emergency to jeopardize the ship with all on board; in moments of supreme necessity to vest the safety of all on the voluntary obedience of the licensed officers, and their construction of the law, require the master when beset with danger to nicely calculate how long each licensed officer had served and require him often to sacrifice his ship, his passengers and crew, on pain of going to prison if he sought to save them, and to put the master of every passenger steamer completely at the mercy of his subordinate officers.

Resolved, That such a proposed law should be condemned as unreasonable and calculated to enhance the dangers which it is the ostensible purpose of the bill to avert, and being class legislation of the most objectionable and dangerous character, in every view and in every sense pernicious and mischievous.

Resolved, That our senators and representatives in congress are respectfully urged to oppose this bill and use their influence to defeat it.

A resolution was unanimously adopted recommending that the salary of the keepers of life saving stations be increased to $1,000 per year, and that the pay of the surfmen of said service be raised to $75 per month. We are satisfied that the life-saving crews are not sufficiently paid for the service rendered, and that an increase of pay is necessary in order to secure and retain good and experienced men in the service.

Resolved, That the Vessel Owners' Association and the members thereof look with disfavor on the practice of loading and discharging vessels on Sunday, and respectfully request the owners and managers of docks at the various ports on the lakes to abolish the practice.

CAPTAIN IRVING of Victoria, B. C., is on his way to Glasgow, Scotland, to inspect a big steamer now building there for the Canadian Pacific Steamship Co. The vessel, which is to be a floating palace, will cost $250,000, and will be completed in July. The steamer goes to the Pacific via Cape Horn.

LAKE CARRIERS' ASSOCIATION,

TO CONSIDER AND TAKE ACTION UPON ALL GENERAL QUESTIONS RELATING TO THE NAVIGATION AND CARRYING BUSINESS OF THE GREAT LAKES AND THE WATERS TRIBUTARY THERETO, WITH THE INTENT TO IMPROVE THE CHARCTER OF THE SERVICE RENDERED TO THE PUBLIC, TO PROTECT THE COMMON INTEREST OF LAKE CARRIERS, AND PROMOTE THEIR GENERAL WELFARE.

BOARD OF MANAGERS, 1887.

THOMAS MARTIN,	Oswego, N. Y.
JAMES ASH, *Vice President*,	Buffalo, N. Y.
W. BULLARD,	Buffalo, N. Y.
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JAS. CAREY EVANS, *Treasurer*,	Buffalo, N. Y.

MARINE RECORD—OFFICIAL PAPER.

BOIS BLANC LIGHTS.

BUFFALO, February 15.

Minister of Marine and Fisheries, Ottawa, P. Q.:

SIR: I take the liberty of writing you with reference to the range lights on the upper end of Bois Blanc island, Detroit river. These lights are now cared for by the same man who keeps the lighthouse at the foot of the island, a mile and a quarter away, and are not watched through the night. The island has lately been sold to a number of people who are building summer residences at the upper end. There is, of course, danger, especially with children about, that the lights may be tampered with, and I would very respectfully suggest that some arrangement be made, either through the family of the lighthouse keeper or in some other way, by which these range lights shall be watched through the night. The steamer Oregon struck on the rocks November 8th last, through one of these lights being out, and other vessels have been endangered. I understand that some trees should be cut down that now partially conceal the lights, and that the ranges are in need of repainting.

I trust that you will pardon these suggestions, and give the subject such consideration as it deserves. Yours respectfully,

FRANCIS ALMY, Sec'y L. C. Ass'n.

MR. WHITING will also ask our government to bring this desired improvement, through the proper channel, to the notice of the Canadian authorities.

BILLS BEFORE CONGRESS AFFECTING LAKE INTERESTS.

Through an oversight we failed to prin last week the bills received from Washington through Mr. J. T. Whiting and the Lake Carriers' Association, and referred to under our article "Washington News." We will give them in the edition of March, 1st, with some additional ones. Some of the less important ones we quote only by number and title. Some of the longer ones, also, we have been obliged to abbreviate. The secretary of the Lake Carriers' Association would be glad to receive any correspondence concerning them, from members or other vessel owners. Special attention is directed to house bills 1527, 1995, 4977, 6135, 7085 and senate bills 460, 1448, 1517, and 1821. All will be duly considered by the Lake Carriers' Association.

OBITUARY.

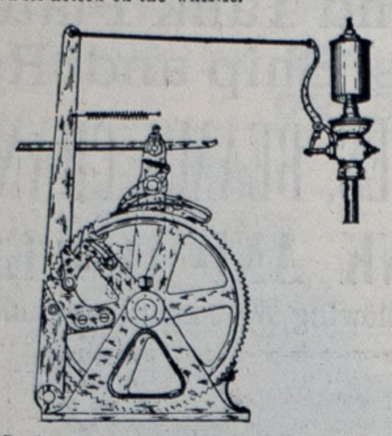
M. T. BRITTON.

The many friends of Mr. M. T. Britton paid their last respects to day. The services were conducted in a manner that would make any grand army man proud. Mr. Britton was, perhaps, one of the best known men among marine engineers, and always invited their confidenec and respect. During the many years that he has been in the lubricating oil business he has, by his fair dealing and honesty, proved to the wor'd that a grand army man will always hold his end up. Mr. Britton was not only a marine engineer, and a good one, but he was a member of Memorial post, G. A. R., and by his services, in defense of his country, deserves the respect and gratitude of all old soldiers. He was a member of the Second Ohio Cavalry. Mr. Britton went to gain his reward on Tuesday morning. He has been in the employ of the Standard Oil Co. for many years, which is sufficient evidence of the satisfaction he has given. There was no one better known among lake engineers than Mr. M. T. Britton, and we consider that the announcement of his death is one of the saddest events of the season. Mr. Britton was a member of the 2nd Ohio cavalry and past senior vice commander of the Memorial post G. A. R. He has been an active and influential member of the post since its reorganization, and the Post has taken charge of his funeral. He will be buried with the honors of war.

THE CHASE FOG WHISTLE MACHINE.

The dangers attending fogs on the lakes are well known to all of our sailor men, and all know that the regulations require that during fogs, a signal shall be sounded at regular intervals. Under the old system of fog signals, the service and close attention of a man was required at all times while navigating in a fog, and this service became so monotonous that Mr. Chase, engineer of the steamer Ohio, devised and patented a machine which, when attached to the engine, would sound the fog whistle automatica ly.

The cut shows the position of the machine and its action on the whistle.



During the season of 1887, the following named steamships "thirty in number" were supplied and equip ed with our machines. The same having given entire satisfaction in each and every case, we refer with pleasure, all those interested, to the owners and masters of said steamers.

Wilson Transit Line, Cleveland, O.—Steamers Spokane, Wallula, Kasota, Tower, Yakima, Missoula, Sitka.

N. Western Transportation Co., Detroit, Mich.—Steamers Fayette Brown, R. J. Hacket, Forest City.

Cleveland Transportation Co., Cleveland, O.—Steamers Sparta, Havanna, Vienna, Townsend.

Bradley Transportation Co., Cleveland, O.—Steamers City of Cleveland, Henry Chisholm, Superior, E. B. Hale, M. B. Grover, J. S. Fay, R. P. Ranney.

H. H. Brown, Cleveland, O,—Steamers Smith Moore, Chas. J. Sheffield.

Owen line, Chicago, Ill.—Steamers Ira H Owen.

Cambria, Outhwaite, Saml. Mather, R. R. Rhodes, Columbia, Aurora.

The machine is at all times under the control of the captain. That is if it is necessary that a signal shall be given to a passing steamer, or for any other purpose; the moment the captain pulls his wire, the fog whistle machine is thrown out of gear and will not resume its sounni g until it is permitted to do so by the master.

Mr. G. C. Barnes, of this city has been to Washington to present the merits of the fog whistle machine to the board of supervising inspectors of steamboats, now in session there, and is well pleased with the results of his mission.

Following is the report presented by the committee.

To the President and Board of Supervising Inspectors of Steam Vessels.

Your committee to which was referred the "Chase Fog Whistle machine" beg leave to report: That we have carefully examined the same and find that it blows at regular intervals, being worked by the engine, thereby insuring regular and continuous blasts for any length of time that may be required and would recommend it or similar device to owners of steam vessels as an additional safe guard to navigation.

H. S. LUBBOCK,
GEO. H. STARBUCK, } Committee.
W. D. ROBINSON,

The manufacturers are the Chase Fog Whistle Machine Co., corner of Elm and Spruce streets, Cleveland, O.

[*Around the Lakes Continued from 1st Page.*]

BUFFALO.

Special to the Marine Record.

At M. Riter's, Eagle Boiler Works, a force of 135 men are very busy at work constructing new marine boilers and doing lots of repairing to boilers on the various lines and other steamships laid up at this port. They have now in hand eleven large boilers, two nearly completed for Captain Frank Perew's, new steamship, recently launched at Cleveland, 10½ feet diameter, 17 feet long, two scotch type boilers 11½ feet diameter 13 feet long and one fire box boiler 10½ by 16½, for James Davidson, West Bay City. The other six are for Buffalo parties, they are also constructing a number of stationary boilers, three for the Tugle Brewing Co., two for the Kaltenbach Brewing Co., one for the Clinton Brewing Co., one for the Broadway Brewing Co., one for the German American Brewing Co., also three for the Thomson & Houston Electric and Power Co. They are also building several boilers for tugs and three boilers have been recently supplied by them for the Buffalo Gaslight Co. Last year was a very busy one and fourteen large marine boilers were constructed and delivered some of them of one inch plate and about 350 tons of steel plate was used in their construction. They have placed new machinery in their shops, enabling them to do heavier and better work than could be done by hand. Their new steam and hydraulic riveting machine has a pressure of 70 tons, and their new steam roller, for rolling plates 14 feet long is a great success. Proposals for new work are coming in daily and the outlook for the future is very good.

The well known firm of Howard H. Baker & Co., of this city may well be classed as one of the leading ship chandlery firms around our inland waters. They have just bought out Messrs. D. S. Austin & Co., who retire from business, taking their entire stock of goods and the good will of the concern. They will retain the Austin store located at the foot of Washington street, running it for the present as a branch of their mammoth store on the Terrace. Messrs. Baker & Co., have been full of business all the winter and have many large orders booked for delivery in the spring. They have just finished the rigging for Captain Frank Perew's, new steamship recently built at Cleveland and have the sails, blocks and balance of outfit well under way. They will also supply her with an American Ship Windlass Co's., steam windlass and steam capstan, a Williamson Brothers' steam steerer, also patent anchors and cable chains. They have the contract for fitting out the new steel steamer Chemung, building at the Union Drydock Co's. They will ship the Ash & Dunforth's new steamships, building at Quayle's shipyard, Cleveland, their steam windlasses and steam capstans and steerers together with their patent anchors and cable chains by the first of March. They took an order last week for an American Ship Windlass Co's, windlass for the steamship Montana of the Western Transit line. They are also supplying the new steamship now on the stocks at R. Mills & Co's shipyard. In their sail loft department they are busy on new sails and repairs for the several transportation lines of steamers whose headquarters are in Buffalo. During the summer months they employ a large force of men and girls on tents, awnings and flags. If large orders are any indication it would seem that Messrs. Baker & Co., were getting their share of the trade at this end of the route at least, and that they will continue to retain their well earned business qualifications as a reputable house nobody doubts it.

At the Lake Erie Boiler Works, two monster scotch type shell boilers for Starke Brothers' steamship, building at Sheboygan, are ready for shipment.

Farrar & Treft, are building a fire box boiler 6 by 11½ for a tug which A. Wood, of the firm of Hingston & Wood, is having built.

The new firm of Baker Parrish & Co's., ship chandlers 35 Main street, who commenced business in June of last year, finding their business on the increase have taken the business premises No. 35 adjoining their present store. It is their intention to add sail making to their ship chandlery business. Charles H. Baker, of the above firm is in New York, this week ordering new stock for the coming season.

The steamship Saginaw Valley, has been handed out and cut in two by her owners at their shipyard at Blackrock. She will be lengthened 25 feet amidships. Her timbers are extra sound and good.

David Bell, is building a marine engine 16 by 18 and steel boiler 6 feet 9 inches by 12 feet 6 inches for a steambarge building at Lorain for the Kelly Island lime company.

Messrs. Gilchrist and Fletcher, of Alpena, were in this city last Friday.

Captain John Keith, of the firm of Keith & Carr, Chicago, was here on Saturday.

Captain James Beckwith, Jr., L. Windmiller and Dan McCarty, arrived here Monday morning from Chicago. WILLIAMS.

PORT HURON.

Special to the Marine Record.

The barge General Burnside, is in Wolverine drydock. She will receive new spar cants, part new rail and new decks and and be all calked when it is needed.

The schooner M. D. Ayres, has just been completed at a cost of about $8,000. She is now in first class shape.

A large gang of men are at work on the S. J. Tilden, getting her ready for the opening of navigation. She is a fine boat.

Captain David Hutchinson, wishes the statement in last issue contradicted. He is not to sail the boat in the Botsford line. He is not placed as yet.

Mr. C. D. Thompson, sold the steamer A. J. Wright, to Ransom, and others of the Sault. Consideration $15,000, cash. She will be converted into a tug to tow rafts.

The W. W. Stewart, is now in Dunford & Alverson's dock and will receive steel arches and other repairs.

The B. B. Buckhout, is just out of the dock and she is as good as new, having an entire rebuild. KENDALL.

The ferries here have had very good luck this winter keeping Black river open the entire winter.

Captain Andrew Rattray, will sail the tug John Owen, for the coming season.

The steamer Mary, has been entirely refitted and repainted this winter and will come out in the spring handsomer than ever as soon as the ice will permit. It is rumored that Ed. J. Kendall, has chartered the barge Norway, to put in connection with his schooner Colonel Brackett, at Walpole island.

Captain Chris. Smith, will command the tug Porter and Captain Conally, the Castle, for the coming season.

The steambarge Nelson Mills and two consorts have been sold by the Mills transportation company to Nelson Mills. Consideration $40,000. POTTS.

DULUTH.

Captain B. B. Inman has scored another point. He has just closed the purchase of one of the finest pleasure steamers on the lakes. The boat is the propellor Ossifrage, built by Frank W. Wheeler, of Bay City, Mich., one year ago, and fitted up in palatial style. She is built especially for pleasure, and can carry 800 excursionists without crowding. The boat has stateroom accommodations for 100 passengers, with complete culinary arrangements. He will build a pier for the special use of the Ossifrage, and on this pier will erect commodious and comfortable waiting rooms for the use of patrons. Heretofore Captain Inman's home has been at Port Huron, but when the Ossifrage comes to Duluth it will bring the captain's family, bag and baggage, and he will make Duluth his permanent home. It may be of interest to state that beginning this season, all of Captain Inman's tugs and boats will "hail" from the port of Duluth. —News.

KENOSHA.

Special to the Marine Record.

Having been imprisoned for the past four weeks, the tug Fred Engle, finally succeeded in forcing a passage through the ice in the harbor and departed for Milwaukee, on the 17th, where she is to receive her new boiler.

Captain Robert Symonds, of the schooner Contest, has had her cabin placed on deck and other extensive repairs made to the amount of $500, which will put her in first class shape for the coming season. She is the boss clipper of her class on the west shore. Captain Symonds, has also purchased the schooner Wolverine, of Kirby & Co., of Grand Haven. Consideration $3,000.

Rumor has it of several more schooners to be added to our already fine fleet of vessels in the near future.

Captain A. Miller, has returned from the east where he has been looking over some vessel property.

Comodore Kimball, intends putting a boiler and engine in his fine yacht Mamie.

Captain M. Maloney, of Chicago, was calling on friends here the past week.

C. A. E.

TOLEDO.

Special to the Marine Record.

Captain Al Fitts will command the steambarge Monohanset and Fred Traufler will be chief engineer; Captain John O'Grady will command the Massasoit and Captain Joe Skeldon the Penokee. The above named gentlemen are well known at this port, and the fact that Captain Hubbard has selected them is a first class recommend in itself. The RECORD joins in with the marine men of Toledo in wishing them success.

Probably before the RECORD is printed again, the Maumee will be clear of ice. The ice in front of the city is well honey-combed. At various points above the ice is broken and gorged. There is no snow on the ground and a flood is not at all apprehended.

Geo. E. Hardy has sold for Captain M. Enright, the tug S. J. Christian to S. B. Grummond of Detroit for $5,000 cash.

Bell the ship carpenter is putting barge spars in the schooner Josephine.

Toby & Co. are putting a set of new wire rigging on the schooner Montana. C. O. D.

SANDUSKY.

Four residents of Kelly's Island had a thrilling adventure on the lake in a small open boat Monday. Henry Eifers, John Himeline, and two others left the island in a fifteen foot boat with ice runners on the bottom bound for Sandusky. They drew the boat along on the ice for some distance west of the island, and then as the ice became treacherous they ran the craft into the water and all got into her. Shortly afterwards a terrible squall came up, picking the water up in sheets and forcing great masses of loose ice down the lake. The men, fearing that their frail craft would be broken to pieces and sink, awaited a favorable opportunity and escaped from her on to an immense cake of ice, pulling the boat up with them. They were completely drenched with water, which froze fast to their clothing, making them look like huge animated icicles. They remained on the cake of ice for four hours, and then finding that to stay there longer meant certain death by freezing in the open lake, they hauled their boat across to an opening, placed it in the water, and started to pull for the shore, some ten miles distant. The wind was blowing so hard and the men were so benumbed that little progress was made. Finding that they could not reach shore and would drift farther and farther into the lake to meet certain and horrible death unless assistance reached them, they stripped off part of their clothing and began making signals with the garments in hope that some one might possibly see them. It so happened that they had been seen when they began drifting out on the cake of ice, and the life saving crew at Marblehead had been notified. The crew had speedily rigged up a boat that would run on ice or in water, and following the direction of the wind, set out to the rescue. With the aid of a powerful glass the signals made by the men were seen, and after four or five hours' hard work the crew reached them. The poor fellows had about given up all hope of rescue and looked upon death as almost inevitable. The crew found them in a terrible condition, with their clothing frozen stiff about them and their blood well nigh congealed in their veins. They were gotten to the shore as soon as possible, and are now quite comfortable.

BAY CITY.

Captain Frank Danger will command the propeller Alcona this season.

Captain John Ivers, late of the propeller Colorado, will command the steamship F. W. Wheeler this season.

The schooner American has again changed hands, being purchased by Captain David Beggs and McCarthy & Marsh, of Oswego, for $5,000.

A meeting was held at Au Gres for the purpose of considering the best course to take in regard to memorizing congress with a view to obtaining an appropriation from the general government for the purpose of improving the navigation of the Au Gres river.

Captain R. Armstrong is negotiating for the purchase of a tug to run in connection with the tug Charles Lee at Saginaw. The ferry Handy Boy will be taken off the Zilwaukie route and placed on the Reservation beach line. Captain Armstrong will have two propellers on the Bay City Saginaw line.

COLLINGWOOD.

The steamer Manitoba, which has been lying idle the past few years, is now owned by Collingwood parties and will ply next season between this port and the Sault.

MANITOWOC.

Berger & Co. have contracted to build a steambarge for Hart Bros., of Manitowoc, of about 300 tons, to ply between Manistique and Chicago.

THE TROUT WHEEL.

The following letters do not need explanation:

PORT HURON, February 17.

H. G. Trout, Buffalo, N. Y.:

DEAR SIR: In reply to yours of the 15th, asking my opinion of your wheels, I would say, the wheels furnished by you for tugs W. B. Castle and D. T. Porter are very satisfactory, and have, I think, increased their capacity at least 20 per cent.

Yours truly, HENRY HOWARD.

ST. AUGUSTINE, FLA., February 8.

Mr. H. G. Trout, Buffalo, N. Y.:

DEAR SIR: I take great pleasure in informing you that the new wheel you made for the steam yacht Victor gives great satisfaction to Mr. Renwick. It runs more steadily, the engine does not run as rapidly. Where we used to make 250 revolutions we now make but 220. Last year the best time we made in a run, called eighteen miles, was 1 hour and 54 minutes. We made the same distance the other day, with the same tide we had in our best run last year, in 1 hour and 30 minutes, a gain in time of just 15 minutes. I hope the Satellite's new wheel will do as well. Yours truly,

JOHN FLORENCE, Engineer.

The former wheel was 6 feet pitch, the Trout wheel 4 feet 9 inches; quite a difference.

THE WELLS BURT.

MACKINAC ISLAND, MICH.

To the Editor of the Marine Record:

Will you name the year and day the schooner Wells Burt was lost in Lake Michigan?

Ans.—She was lost on the 20th of May, 1883. She was built in 1873, was 756 tons burden and valued at $33,000. Coal laden at the time she was lost.

BEAM ENGINE FOR SALE.

OR WILL EXCHANGE FOR A SMALL

PASSENGER PROP'R. STMR.,

Second hand 50 inch Cylinder by 11 feet stroke. Stevens Cut-off. All complete as taken out of boat.

C. W. COPELAND,
24 Park Place, N. Y.

FOR SALE.

BARGE COL. BRACKET—She carries 260M feet of lumber, 420 tons of coal. Had $900 worth of repairs last season. Fitout good. Price $1,400. Mention this paper. ED. J. KENDALL, Port Huron.

A2 VESSELS WANTED.

IN EXCHANGE for improved Buffalo city property, three fourths of a mile from City Hall, West Side. Fine dwelling houses that always rent. Address, M. BROS., 22 Root St., Buffalo, N. Y.

THE REVENGE OF A VICTIM.

CAIRO, ILL. Feb. 13, 1888.

Special to the Marine Record.

It was funny and you ought to have been there just to see those engineers fly out of the City hall in Chicago. They knocked Tracy off the fence, upset an apple woman, and rushed madly toward the Union depot all because some one told them that a three masted vessel had just sunk over the Washington street tunnel and having capsized, that one of the masts had punched a hole through the bottom of the river, entering the tunnel, killing a horse and its unfortunate rider. The boys wanted to get a piece of the mast for a keep sake, emblematic of the injustice of the people of Chicago, who want the bridges closed to the detriment of navigation. You know there was nothing in it and the boys found they were fooled, when some one asked the crowd who it was that tied a man to a steam boiler with intent to kill. So you see I got even with them.

The trip to Milwaukee was wholly devoid of interest, save that one of the boys asked if it was the frost that bleached the bricks, with which Milwaukee houses were built.

Feiner's hall is where the convention met, a very pret y hall indeed, devoid of any especial ornaments, save two placards suspended over the speakers desk, upon one of which was written "Welcome to Our City" and upon the other was written "No Throwing at Cats," the last motto being posted for Mr. E. D. Bateman's benefit. When the convention met in Philadelphia, Mr. Bateman, the silver tongued orator from the Ohio, with a few others ran down to New York, and while walking down one of the narrow streets of Go ham one dark night, his path was crossed by a black cat, aye, the veritable black cat made hideous by Poe's famous story. Bateman picked up a brick and let drive in the darkness missed the cat, and sent the missile flying through a thirty by sixty window glass. The cat escaped death by the bad aim, and Bateman escaped arrest by his excellent running. Mr. Elliott knowing the weakness of his friend Bateman, quietly warned him of his danger by a friendly hint. But poor Bateman, danger befell him after all, for on a visit to the Philadelphia best brewery he was lost in a hopper.

Milwaukee is not a very large city, or the association very strong, numerically, yet their entertainment of the assembled representatives was indeed magnificent.

A splendid tribute of friendship was the donation of Mr. Butler of the Goodrich line, who in response to an invitation to attend the ball given in honor of the delegates, sent his check for a handsome sum of money.

While I must regret the treatment accorded me in Chicago, still I am constrained to call the assembled representatives as fine a body of men as ever congregated together.

Mr. Editor my pocket book is pretty thin, so I'll have to leave here. I enclose a nice list of subscribers, for the boys will have the paper even though they pay for it.

THE SECOND ENGINEER.

☞ *Vesselowners* and *Lake Captains* ☜ is it profitable to support big expensive stores when the Boston Dry Goods Store of Kohn & Co., 213 Detroit st., two doors from corner Pearl, furnishes ☞ *Table-linens, Towels, Comfortables, Blankets*, etc., and also ☞ *sew to order* ☜ at shortest notice ☞ *Sheets, Pillow-cases*, or any other bedding equipments at 20 per cent less, because our expenses require 20 per cent less profit, with the additional advantage that we also buy from manufacturers direct for cash only? ☞ *Our Shirt-manufacturing* Department offers all kinds of *Flannel, Cloth* and *Waterproof Shirts*, 54 in. wide, 40 in. long, wide sleeves, and extra well sewed, full regular *home-made*, or if desired, take measures and make them to order to the taste of the customer for the same price as the ready-made shirts sell for. ☞ Our *own make* Overalls, *Jumpers, Cotton Shirts*, and *Jean Pants* can not be compared with any store-made garments, and will also make them to order without any additional charges.

☞ Our strictly *One Price* system guarantees square dealing and lowest prices.

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IS DEATH TO

MALARIA; CHILLS AND FEVER,
TYPHOID FEVER, INDIGESTION
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SLEEPLESSNESS OR INSOMNIA
AND NON-ASSIMILATION OF FOOD.

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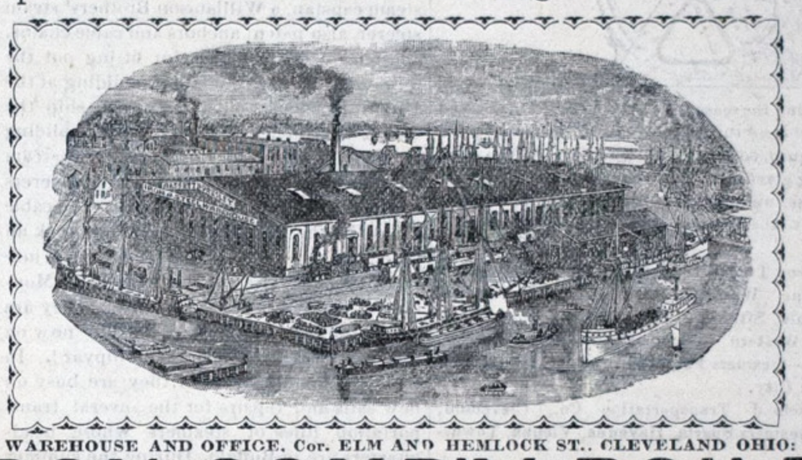

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BURDEN IRON COMP'Y BOILER RIVETS.

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Our Correspondents will please note that the Western Union Telegraph Co.'s Wires are connected with our office, and much time will be saved in the transmissio and delivery of messages to us if sent via that Company.

WE SOLICIT YOUR TRADE.

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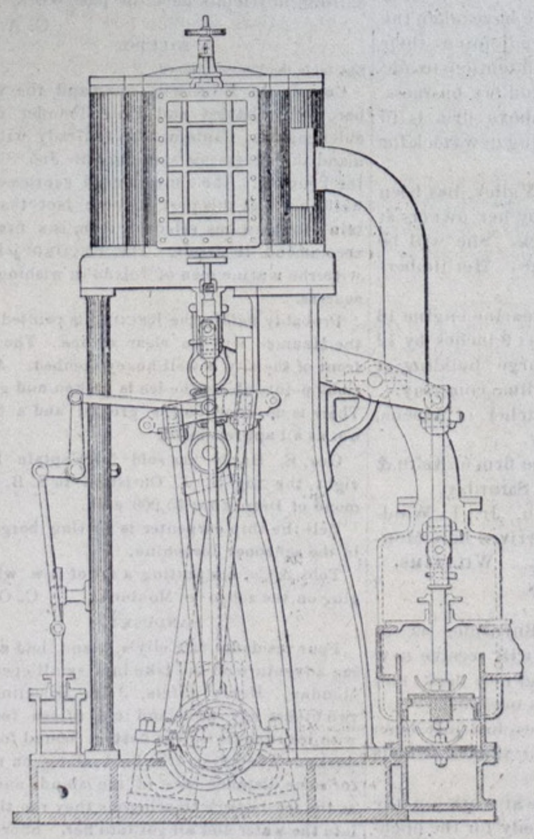

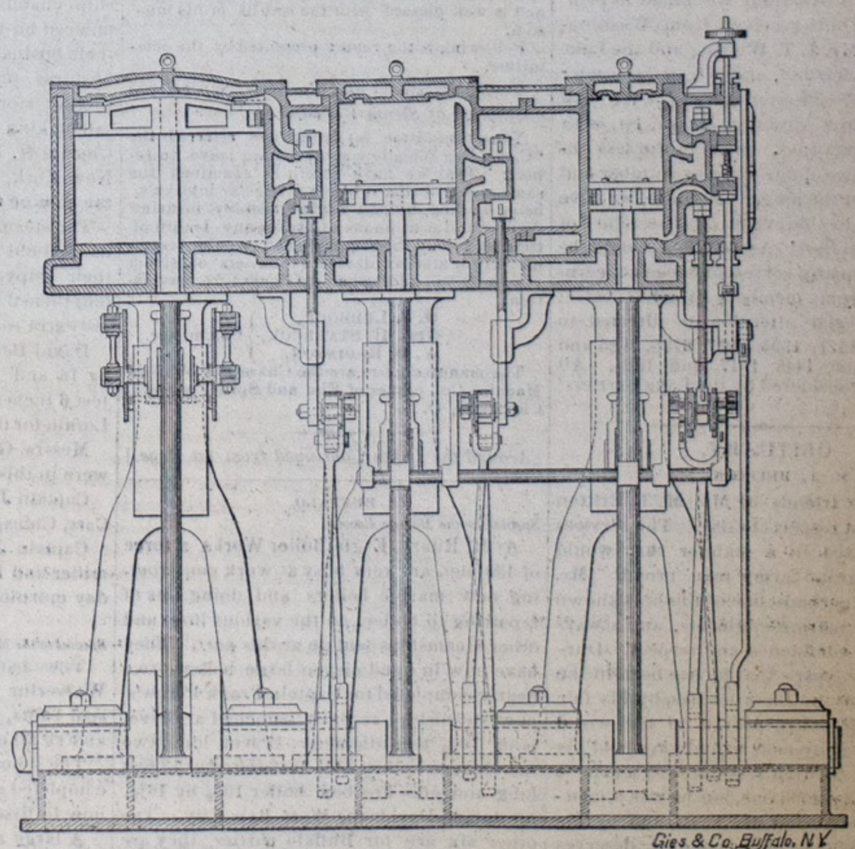

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TEARE, WIGHT & CO.

WINDLASS FOR SALE.
The undersigned have a Hadfield Patent windlass or a one and three-eighths inch bar chain for sale cheap. JOHNSON & BATES,
927 Erie St., Racine, Wis.

For Sale.
The Scow-Schr. Sippican.
Length 96 and 2-10ths feet, breadth 24 feet, hold 7 feet, (as per enrollment.) Capacity, 175M lumber under sail on draught of 8 feet. Largest cargo ever aboard, 212M feet lumber, Grand Marias to Tonawanda. In first-class order, rat s B' new main and fore sails last fall, needs no repa rs. Vessel now lying at New Baltimore, Michigan For further particulars, address
GILBERT HATHEWAY, Agent,
MRS. E. L. HATHEWAY, Administratrix,
New Baltimore, Mich.

For Sale.
One 15x16 Marine Engine.
Two Steeple Compound Marine Engines, Cylinders 12 and 20 by 16 stroke.
These are under construction and can be completed on short notice. Will furnish BOILERS with these if desired. For prices, etc., address
PHŒNIX IRON WORKS, Port Huron, Mich.

WANTED.
I OWN A STEAMBARGE, and want to buy one or two barges or schooners to tow, that will carry from 500 to 550 M feet of lumber. Any person having any such boats, who will sell them at a reasonable price and on long time. Address
BOX 181, BAY CITY, MICH

WANTED.
TO BUY, on easy terms, a schooner of 250 to 325 tons capacity, on from 8 to 9 feet draft of water. Or such a vessel or barge to sail on a share of earnings. Address MARINE RECORD, Cleveland, O.

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This is one of the finest steambarges on the lakes, and was built in 1884. She is in good condition in every respect, serviceable, easy to load and unload, and a great favorite. She can not be duplicated for the same money. Her dimensions are 131 feet keel, 143 feet over all, 23.4 feet beam, 8.4 feet depth of hold, and is classed A1½ by Inland Lloyds. She carries two masts. Her carrying capacity is 400 to 425 tons or 14,000 bushels of wheat, or about 240,000 feet of lumber on a dratt of 9 feet 9 inches. Her engine is high pressure 18x20 and her boiler 6½x12 feet of 7-16 Otis steel. Speed 10 miles loaded or 11½ light.
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Commencing December 4th, 1887. The time given in the figures below is the new standard (Ninetieth meridian) time, which is thirty-three minutes slower than Cleveland time proper.

Eastward.	Arrive	Depart.
No 4, Fast Limited Express	*2 55 A M	*2 55 A M
No 8, N. Y. B & A Express	*8 30 A M	*3 55 A M
No 26, Elyria Accommodation	†7 45 A M	.....
No 24, Buffalo Ac'm via Sandusky	†10 05 A M	†10 15 A M
No 24, Toledo Accom via Norwalk	†10 05 A M	†10 15 A M
No. 10, New York & Boston, "Flyer"	.....	*11 35 A M
No 12 N Y & B Fast Express	*2 20 P M	2* 45 P M
No 2, Night Ex via Norwalk	9 40 P M	†10 00 P M
No 22, Night Ex via sandu-ky	†9 40 P M	.....
No 26, Conneaut Accommodation	†4 25 P M	.....

Westward.	Arrive.	Depart.
No 1, Fast Limited Express	*12 15 A M	*12 15 A M
No. 23, Cleveland Express	*2 15 A M	.....
No 3, Chicago Express via	§5 30 A M	5 45 A M
No 25, Mich Accom Norwalk	.....	†5 45 A M
No 21, Toledo Ex via Norwalk	†12 50 P M	†3 20 P M
No 5, St Louis Ex via Sandusky	*10 50 A M	*10 55 A M
No 9, Chi Pac Ex via Norwalk	*6 55 P M	*7 15 P M
No 31, Elyria ac to Elyria only	.....	†4 30 P M
No 27, Conneaut Accommodation	†8 10 A M	.....

Sunday train for Nottingham—Depart 9.20 a. m and 1.00 p. m.; returning, arrive at 9.20 a. m. and 4.45 p. m.
Reference marks—* Daily, † daily, except Sunday, § daily, except Monday.
A local Cleveland and New York sleeper, also sleeper for Boston, and dining car daily on No. 10, leaving Cleveland at 11.35 A M.; arrive Grand Central depot, New York, 7.30 a. m
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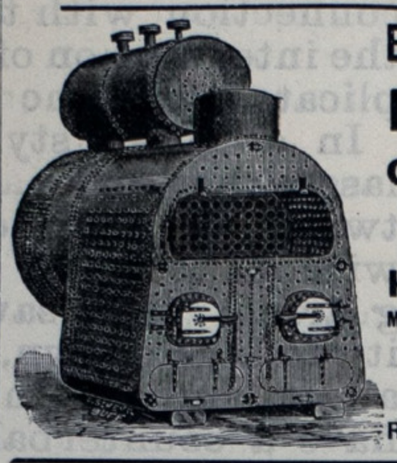

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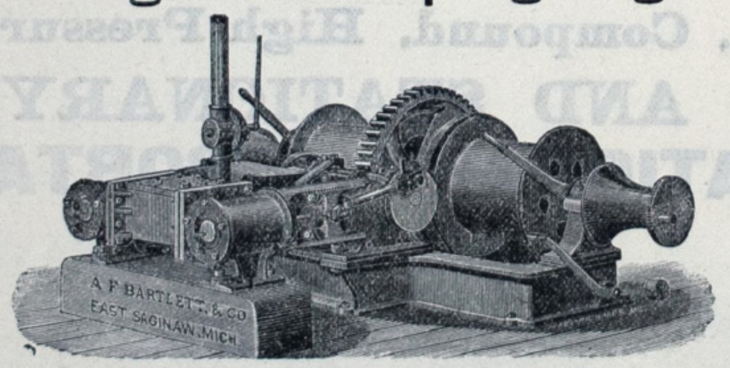

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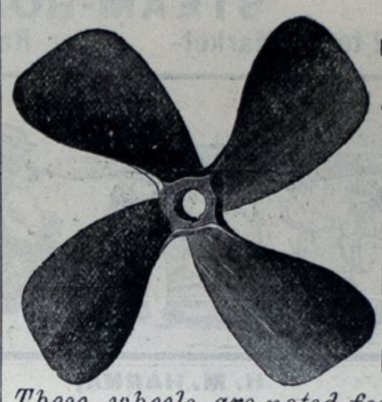

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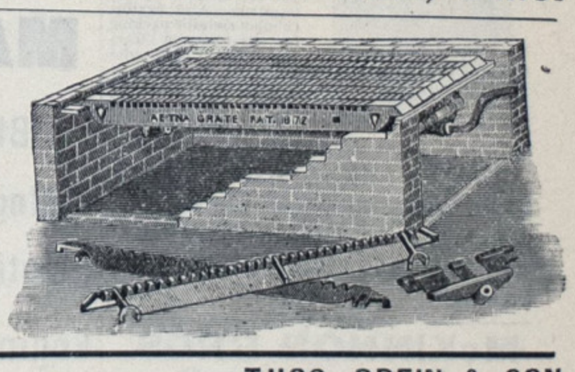

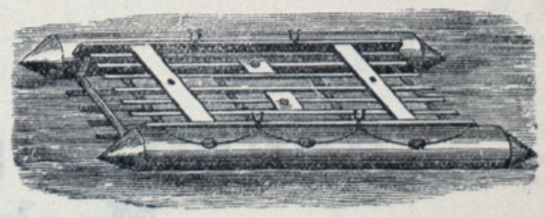

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Twelve feet long, 5 feet 3 inches diameter, thickness of plate 5/16ths of an inch, allowed 90 lbs. of steam Nine years old.

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Length 60 feet, beam 15 feet, depth 7 feet, draft 7 feet, engine 16 by 18, boiler 11 feet long 6 feet diameter, allowed 100 lbs. of steam. Built in 18;9, and is in good repair.

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Length 60 feet, beam 14 feet, depth 7 feet, draft 8 feet, engine 17 by 17: steel boiler 12 feet long, 5 feet 4 inches diameter, of 5/16ths plate, allowed 100 lbs. of steam Hull rebuilt in 1887.

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Length 54 feet, beam 15 feet 6 inches, depth 7 feet, engine 17 by 18, boiler 10 feet long, 5½ feet diameter, of 5/16ths plate, allowed 90 lbs. of steam. Rebuilt in 1885.

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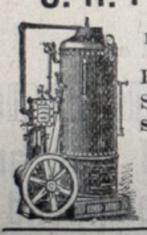

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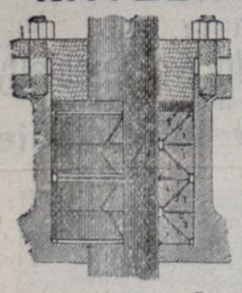

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CAPT. THOS. WILSON, who uses this packing on his Steamers, and THE MARINE RECORD are Agents for Cleveland and the Lakes.

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Schooners can have their Compasses Adjusted for Local Attraction at the time of repairs by stating how much they are out on East or West Courses, and which way it leads, North or South of above Courses
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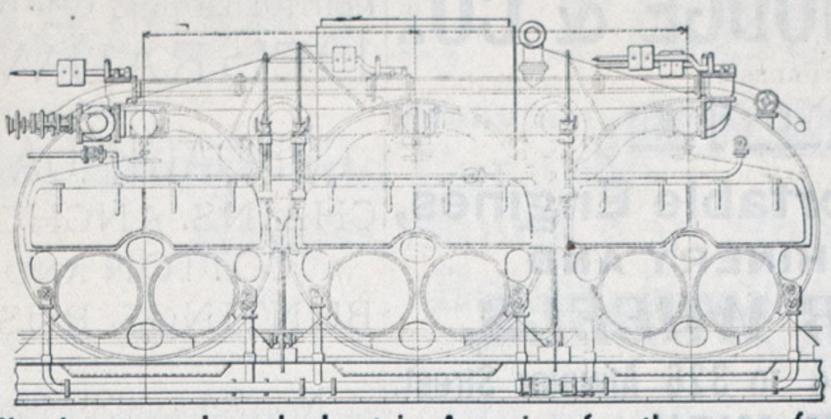

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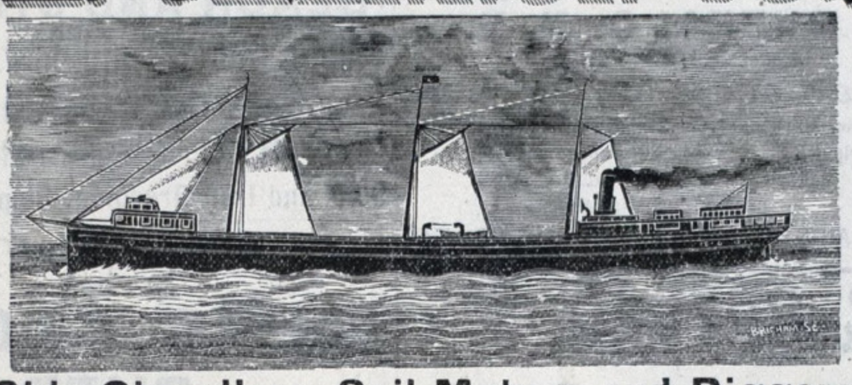

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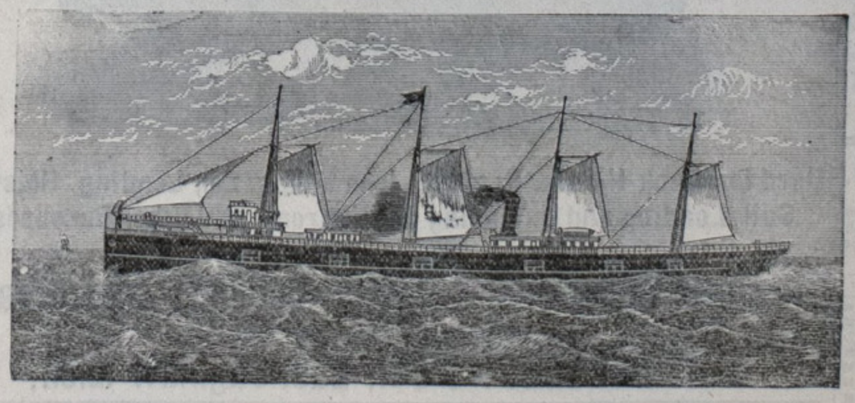

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